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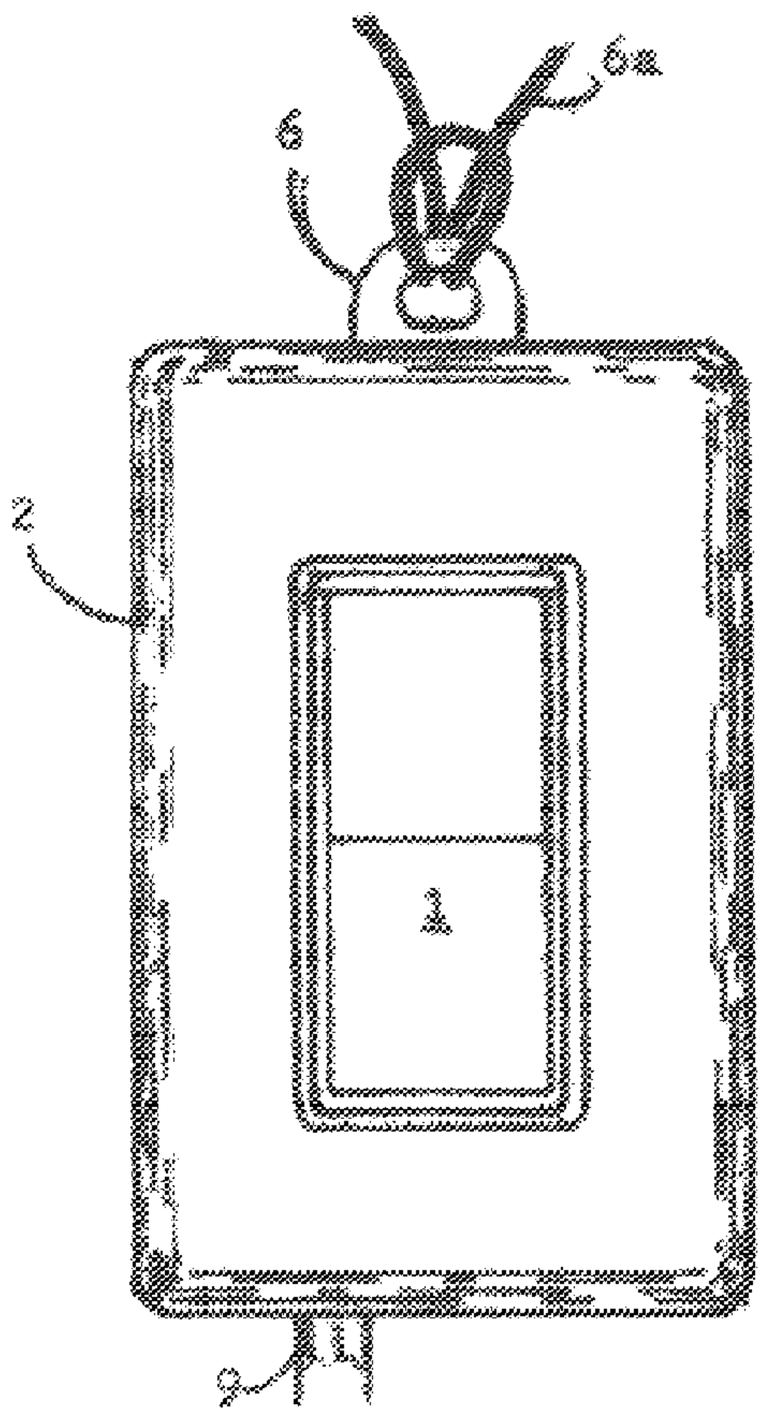
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(72) Inventeur/Inventor:
DYKEMAN, ALLAN H., CA

(73) Propriétaire/Owner:
DYKEMAN, ALLAN H., CA

(74) Agent: DEETH WILLIAMS WALL LLP

(54) Titre : INTERRUPTEUR LUMINEUX
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(57) Abrégé/Abstract:
This portable device relates to an in-line switch used to illuminate. The switch has a soft glowing light which is visible in a darkened room. Elderly people remove their eyeglasses when resting, and the soft glowing light locates the switch when light is required at bedside.

ABSTRACT

This portable device relates to an in-line switch used to illuminate. The switch has a soft glowing light which is visible in a darkened room. Elderly people remove their eyeglasses when resting, and the soft glowing light locates the switch when light is required at bedside.

ILLUMINATED IN-LINE CONTROLLER

FIELD OF THE INVENTION

This portable device relates to an in-line switch used, more specifically to a switch with a soft glowing light.

BACKGROUND OF THE INVENTION

This invention relates to a novel configuration for a controller which can be used by elderly people, disabled people and hospital patients. People usually remove their eyeglasses when in bed and this makes it difficult to find a conventional switch in a darkened room when attempting to locate an electrical device such as a lamp (e.g. near a bed). Use of this controller overcomes that difficulty. The device uses an illuminated rocker switch of proven reliability enclosed in a shock resistant plastic case. The device is connected to a power cord which terminates in a special split plug.

There are illuminated wall switches available, some with LED lights which cannot be used by persons in bed. There is a portable device made by Lutron™ Electronics under US patent no. 4,104,606 that has a small LED light and is difficult for an elderly person to see with their eyeglasses removed in a darkened room. The present device has a projection on the case with a hole in it, through which a string may be inserted to suspend the device for use in a sick bed or to child proof a room when appliances such as fans or electric heaters are used.

SUMMARY OF THE INVENTION

A primary object of the present invention is to provide a simple, reliable, portable in-line controlling device to be used in a darkened room, e.g. by elderly and disabled people who remove their eyeglasses when in bed. A further objective of the invention is to provide a device that is easily installed. This device has a minimum of parts which can be manufactured with conventional machinery and is easily assembled.

Toward these objectives a preferred embodiment is described as follows:

A portable in-line illuminated switch enclosed in a shock resistant plastic case having skid resistant plastic feet. The switch is mounted on pedestals molded on a bottom plate. A two conductor power cord with tinned conductor ends are inserted in the switch and when the bottom plate and case are assembled, the power cord exits the case and terminates in a male/female plug of a well-known type. The male part of the plug is inserted into a power

source outlet and a bed lamp or such is inserted into the female part of said plug. A bed lamp may be controlled and illuminated for bedside use. A further embodiment may be programmed to illuminate a hall or bathroom or such providing a safe environment.

Although various embodiments have been described above, many variations and modifications will now be apparent to those skilled in the art.

Variations such as: - a device, portable, with an illuminated switch suitable as a foot operated device for domestic use. A permanent magnet may be attached to a bed lamp controller for use in hospitals where much of the furniture is enamelled metal. All of these devices may be produced in decorator colours.

BRIEF DESCRIPTION OF THE DRAWINGS

A preferred embodiment of this invention is described in the attached drawings in which:

FIG. 1 is a plan view of the preferred embodiment.

FIG. 2 is an end view of FIG. 1.

FIG. 3 is a section view of side of FIG. 1.

FIG. 4 is a plan view of M/F power cord adaptor.

FIG. 5 is a section end view of FIG. 6.

FIG. 6 is a plan view inside case.

FIG. 7 is a plan view of switch mounting plate.

FIG. 8 is a side view of FIG. 7.

FIG. 9 is section showing serrations gripping insulation on power cord.

FIG. 10 is a plan view of bed lamp controller with illuminated square push-button face.

FIG. 11 is an end view of FIG. 10.

FIG. 12 is a console configuration.

FIG. 13 is a gang configuration.

DETAILED DESCRIPTION OF THE INVENTION

The preferred embodiment of the invention is described as follows.

FIG. 1 designates a portable illuminated rocker switch 1, secured within an impact-resistive plastic case 2. The bottom plate 3, shown in FIG. 3, is preferably molded of similar material as

the case **2**. The bottom plate shown in FIG. 8 shows pedestals **4 5**, of molded articulated structure on which the rocker switch **1** is mounted. In FIG. 1 a projection **6** is molded on mounting plate **3** and may be used to suspend subject device by a string **6a**. In FIG. 7 the raised area **7** is used to guide power cord **9** from switch over raised serration **8** which is molded with mounting plate **3**. Referring now to FIG. 6, the raised serrations **9 10** are molded with mounting plate **3** and are part of the articulated structure within the case **2**. A two-conductor power cable **11** with conductors laid parallel with vinyl insulation, is typically used to connect to illuminated switch **1**. The bare ends of the cord **9** are preferably tinned and inserted in quick-connect switch openings. The power cord **9** of a suitable length with switch attached and mounted on pedestals **4 5** in FIG. 8 is guided over serration **8** in FIG. 7. The case **2** in FIG. 1 is guided over base plate **3** in FIG. 3 and a plurality of fasteners (4 screws shown) are inserted in opening **14 14a 15 15a** for final assembly. The use of fasteners such as screws is optional; the two parts may be kept together by friction with a snap-on type engagement. The power cord **9** as described above is of a suitable length and terminales in a special plug of a well-known type with M/F features. The soft plastic feet **16 17** as shown in FIG. 8 are inserted in pre-molded recesses.

Further embodiments of the invention are described in the drawings FIGS. 10, 11, 12, 13. FIG. 10 represents a portable gang configuration where illuminated switch faces are different colours to be used for different task.

FIG. 10 represents a controller **23** using a switch **1** with illuminated face with a push-button configuration shown in **20**. FIG. 11 is an end view of FIG. 10, and a female receptacle **21** is shown for a power source for an additional appliance.

FIG. 12 represents a console configuration suitable for use in for example a hotel or motel. The console would include services such as telephone **22**, a controller **23** (for *e.g.* a bed lamp), clock **24** and computer outlet **25**. Fig. 13 is a gang configuration.

Although preferred embodiments have been described, many variations and modifications will be apparent to those skilled in the art and it is therefore, preferred that this invention be limited not by the above disclosure but only by the appended claims.

CLAIMS

WHAT IS CLAIMED IS:

1. A portable in-line switching device comprising:

a housing and base of shock resistant material;

a main switch constructed at least in part of a translucent shock-resistant material and received in a surface of the housing;

an illuminating element contained in the housing for providing a source of light emission through the main switch; and

a projection being part of the base defining an aperture for attaching the switching device;

wherein the main switch is connected to a power cord terminating in a dual purpose plug and the main switch is operable between an open and a closed switch position by applying an operative force against at least a portion of the translucent shock-resistant material.

2. The device according to claim 1, wherein the main switch is a rocker switch.

3. The device according to any of claims 1 to 2, wherein the housing is fastened to a base, the base comprising two pedestals.

4. The device according to claim 1, wherein the main switch is a foot-operated switch.

5. The device according to claim 1, wherein the main switch is a push button switch.

6. The device according to claim 3, wherein the base comprises feet for reducing skidding on external surfaces.

7. The device according to claim 3, wherein the feet are inserted into a plurality of recesses defined in said base.

8. The device according to claim 3, wherein the base comprises a raised area for guiding a power cord from the main switch out of the housing.

9. The device according to claim 3, wherein the base comprises a first raised serration and the raised area guides the power cord from the main switch over the raised serration out of the housing.

10. The device according to claim 9, wherein the housing defines a second raised serration opposing the first raised serration for securing the power cord when the housing is fastened to the base.

11. The device according to claim 10, wherein the plane defined by the first and the second raised serration is transverse to the axis of the power cord.

12. The device according to claim 10, wherein each of the raised serrations presses on a resilient insulation layer covering the power cord when securing the power cord.

13. The device according to claim 3, wherein the main switch is mounted on the two pedestals.

14. A portable in-line switching device comprising:

a housing constructed of shock-resistant plastic;

a main switch constructed at least in part of a translucent material and received in a surface of the housing; and

an illuminating element contained in the housing for providing a source of light for emitting light through the main switch;

wherein

the main switch is a rocker switch;

the housing is fastened to a base, the base comprising two pedestals;

the base comprises

a projection defining a hole for attaching the housing to an external object;

feet for reducing skidding on external surfaces;

a raised area for guiding a power cord from the main switch out of the housing; and

a first raised serration and the raised area guides the power cord from the main switch over the raised serration out of the housing;

the housing defines a second raised serration opposing the first raised serration for securing the power cord when the housing is fastened to the base; and

the plane defined by the first and the second raised serration is transverse to the axis of the power cord.

15. The device according to claim 3, wherein the illuminating element is in electrical communication with the power cord.

16. The device according to claim 1, further comprising:

a second switch constructed at least in part of a translucent material and received in the surface of the housing.

17. The device according to claim 16, wherein the translucent material of the second switch has a different colour from the translucent material of the main switch for distinguishing the second switch from the main switch.

18. The device according to any of claims 1 to 17, wherein the illuminating element serves as a beacon for a person in a darkened environment.

19. The device according to any of claims 1 to 17 for use in a bed or in a room where an electric fan or an electric heater is being used.

FIG 1

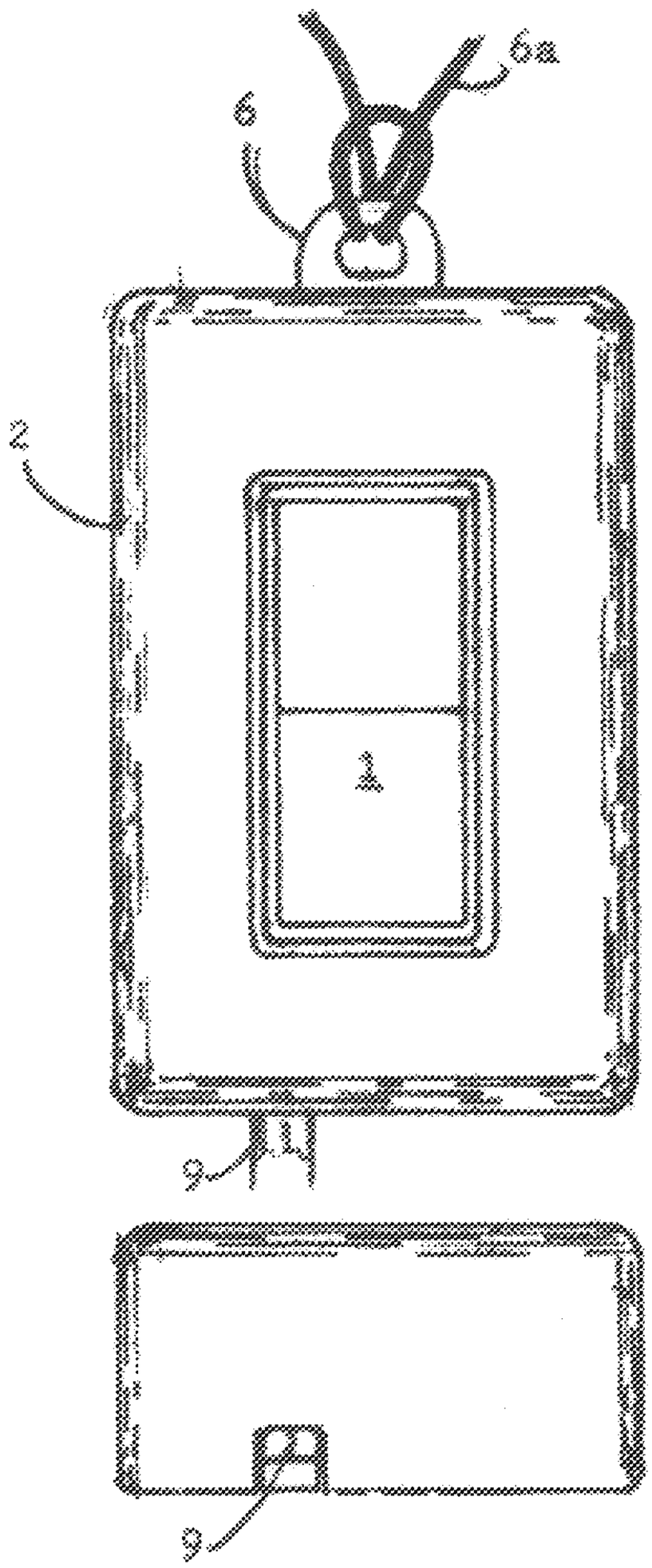


FIG.2

FIG.

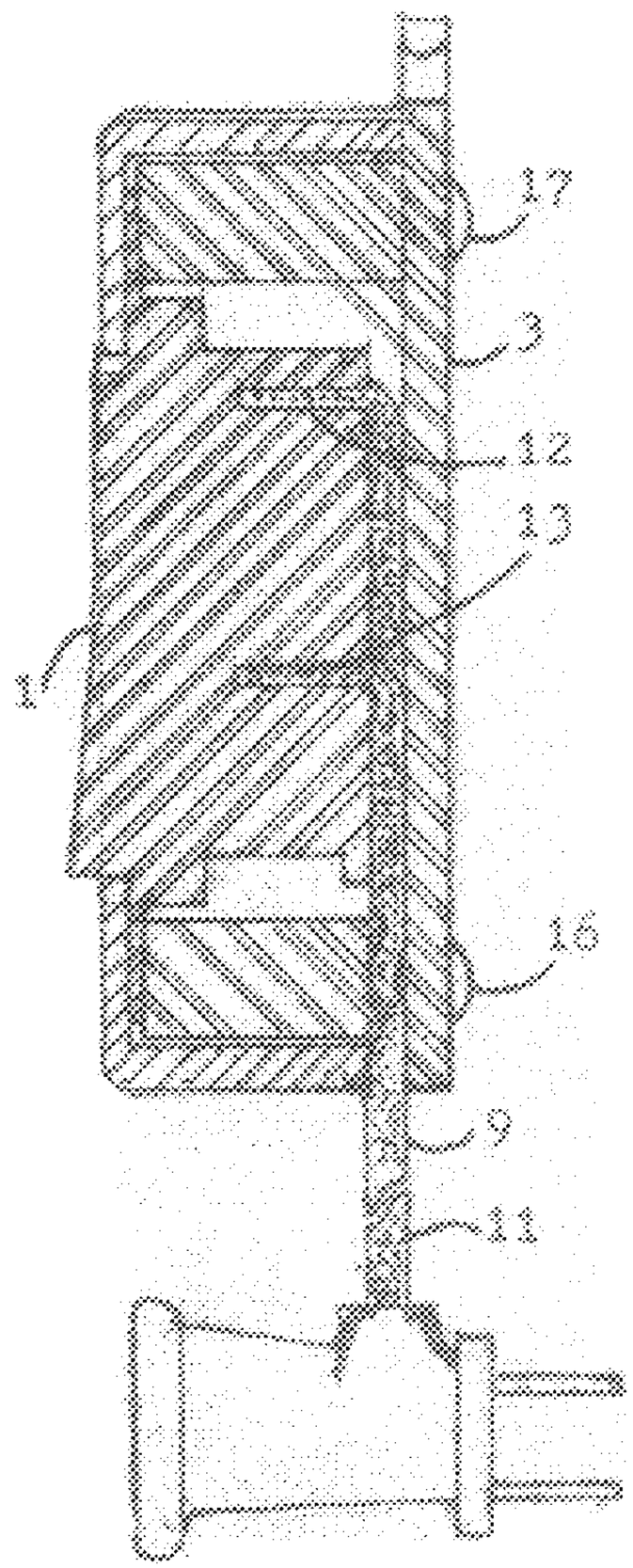


FIG 4

FIG.5

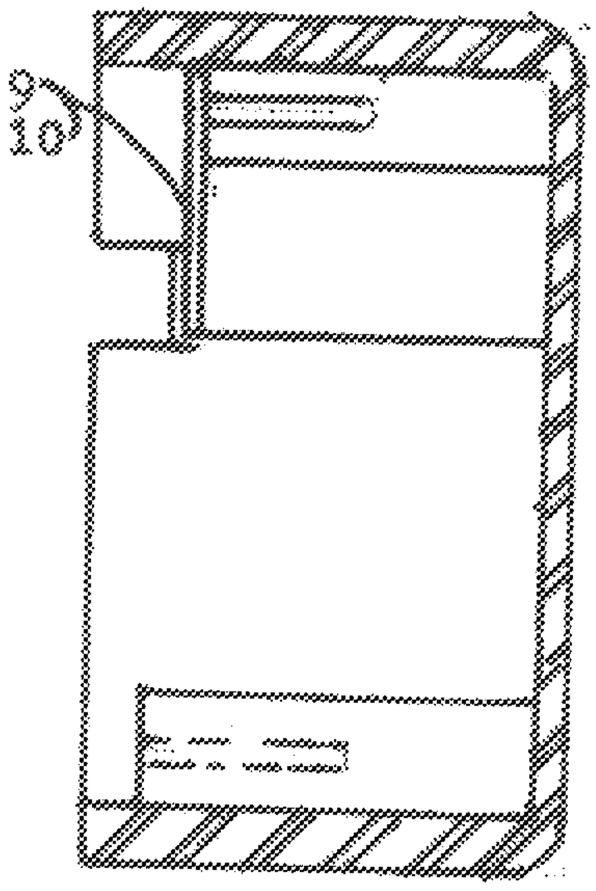
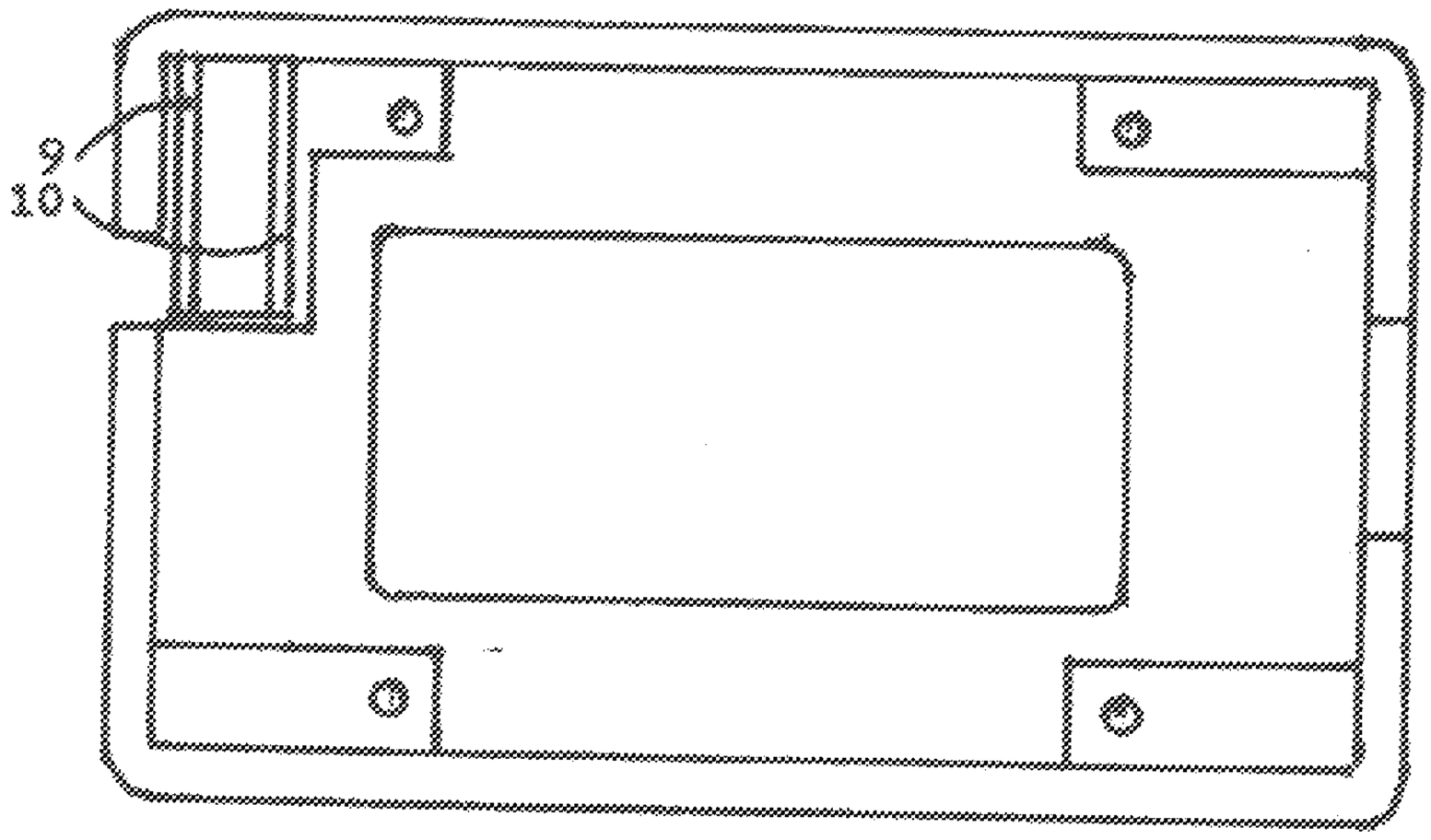


FIG. 6



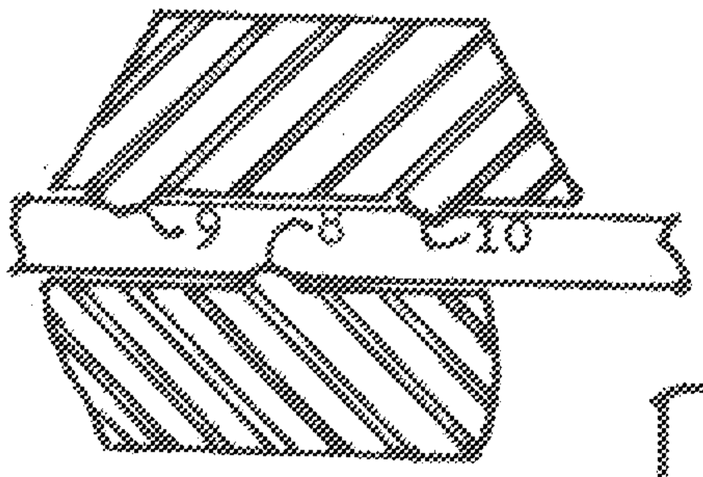


FIG.9

FIG. 7

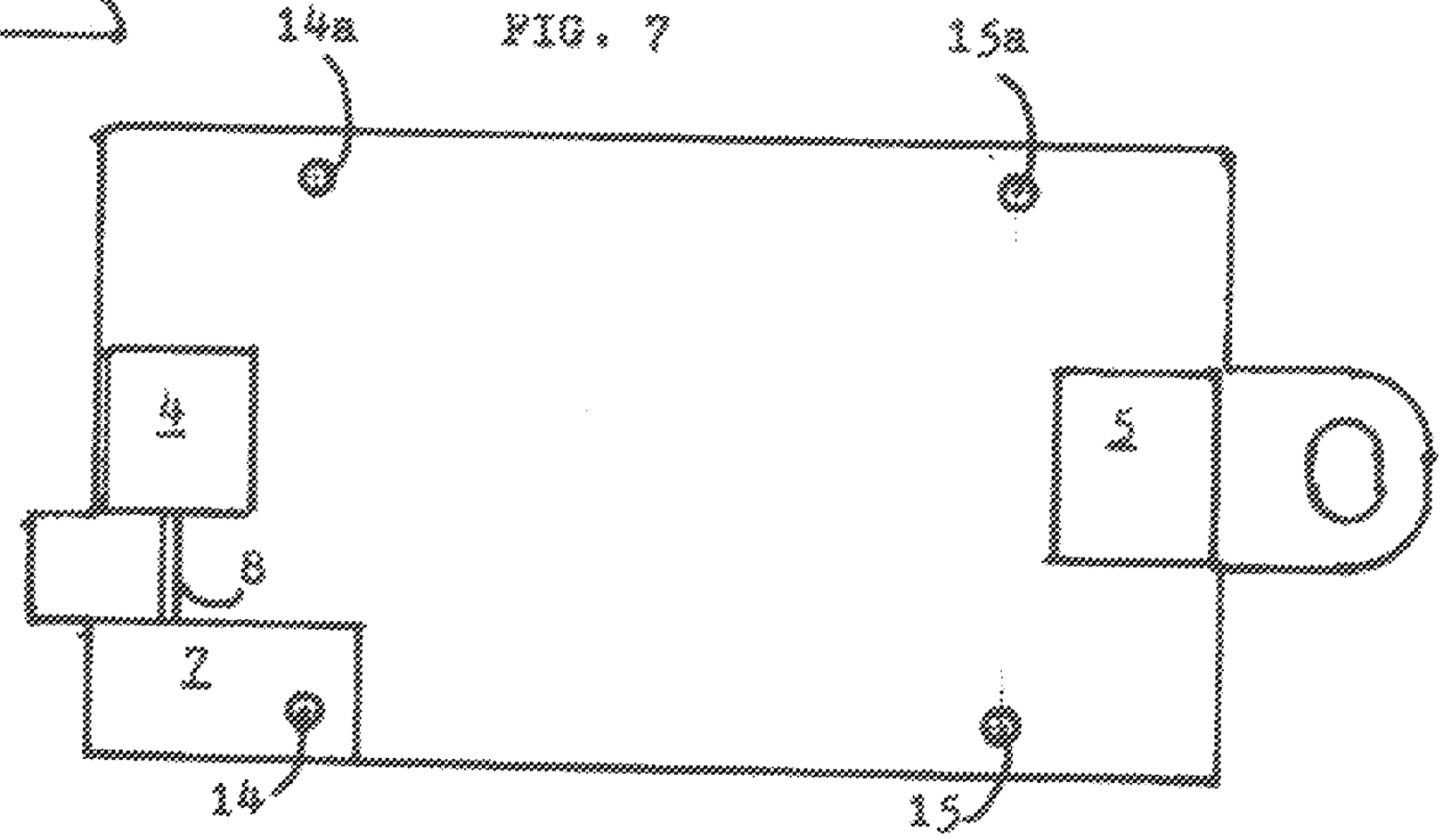


FIG.8

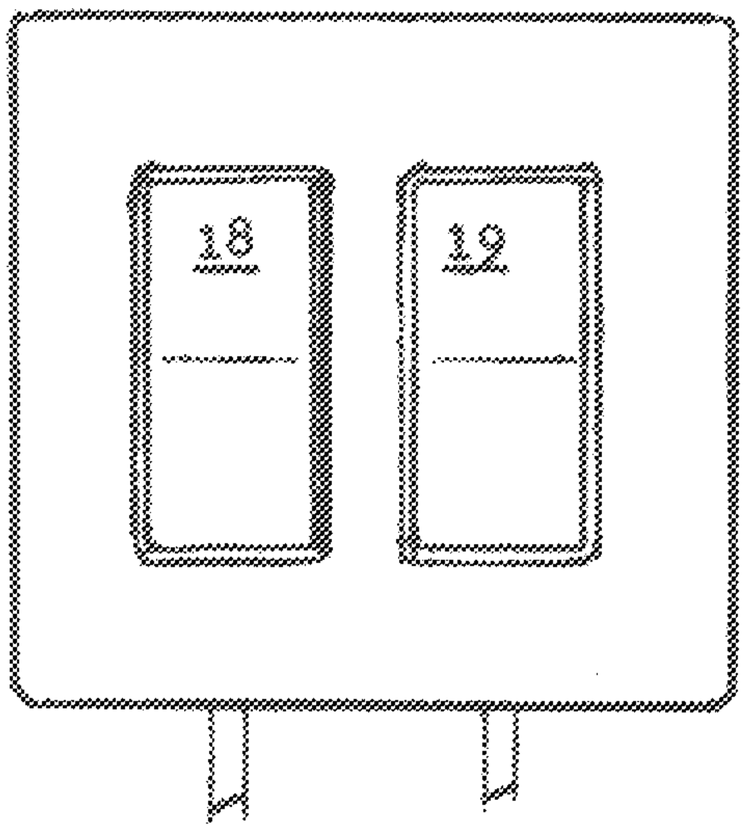
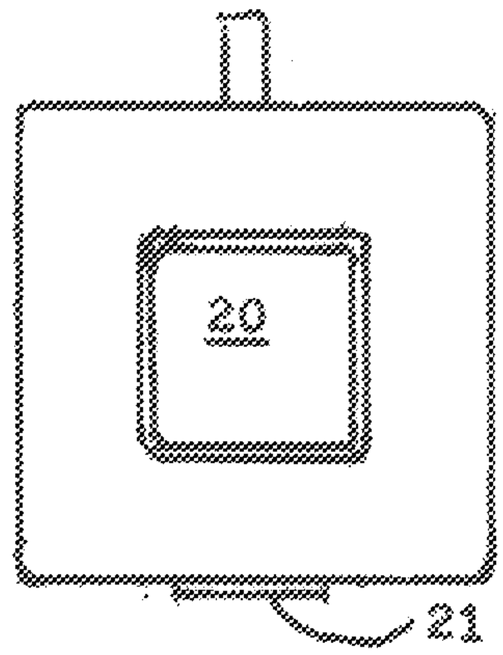


FIG. 13

FIG. 10



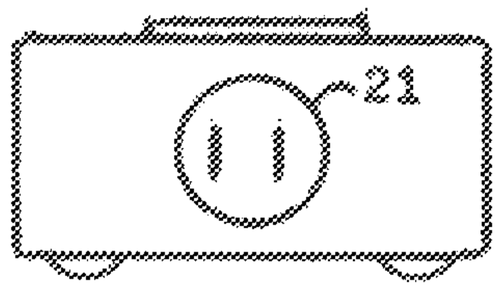


FIG. 11

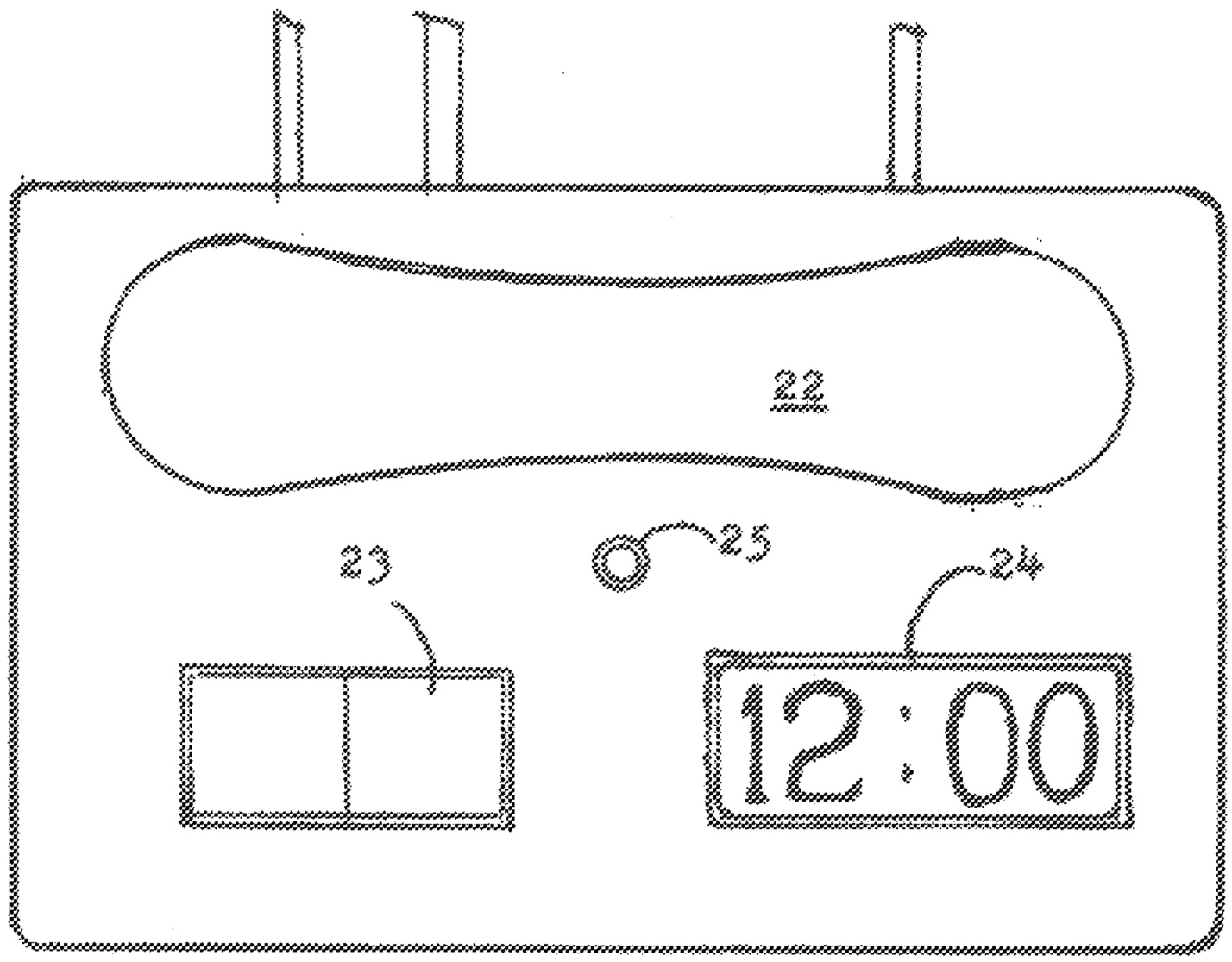


FIG. 12

